

United States Department of Agriculture  
Soil Conservation Service  
Plant Sciences Division  
Washington, D. C.

Notice of the Release of a Variety of Birdsfoot Trefoil.

Name: Mackinaw birdsfoot trefoil, Lotus corniculatus.

Accession Numbers: M2-11348 and Mich-240. — *PI-340799*

Origin: Seed was obtained originally from the Preston Hollow area of New York State in 1938 by the Ames SCS Nursery. Seed was reproduced for three generations in Iowa. The third generation increase was on a 20-acre field established in 1948 in Madison County, Iowa, on land leased by the SCS Nursery from Robert Baur. Seed was harvested from 1950 to 1952 and used to establish district seed fields in Iowa. After the lease was terminated on June 30, 1953, the field was maintained by the son, R. Edward Baur, Rural Route, Van Meter, Iowa. Seed was harvested from 1954 to 1957.

Mackinaw, formerly tested as M2-11348 and Mich-240, originated from a lot of seed harvested by R. Edward Baur on the old field in Madison County in 1957. Three pounds of seed were received by the Rose Lake Plant Materials Center from V. B. Hawk and C. P. Wilsie out of a lot of M2-11348-57 stored in the Agronomy Department, Iowa State University. This seed was planted on the Rose Lake Plant Materials Center near East Lansing, Michigan, in April of 1962.

Method of Breeding or Development: Mackinaw is a production of natural selection under Iowa conditions for several generations.

Description: Resembles Empire birdsfoot trefoil in general characteristics being a semi-prostrate, late blooming pasture type. It differs in being more vigorous in the seedling stage and higher yielding in the mature plant stage. Better adaptation to soil and climatic conditions of the Midwest is the important characteristic of Mackinaw.

In ~~row~~ evaluation at the Rose Lake Plant Materials Center, East Lansing, Michigan, it was superior in forage production and stand persistence to New York Empire.

The strain ~~has~~ been widely tested in the USDA Uniform Legume Nurseries under the designation "3rd generation Iowa." Comparisons were made with Empire birdsfoot trefoil, at the Iowa State University, the University of Illinois, and the Elsberry Plant Materials Center.

Four years of data from the University of Wisconsin show the response of alfalfa and birdsfoot trefoil to soil drainage; legumes grown alone or in mixture with brome grass. In this work M2-11348 (proposed Mackinaw) trefoil was represented by B-M-2. A copy of this data is attached.

Conservation use or potential: For use as a perennial legume with grass for pasture or hay. For use with grass for seeding earth fills and banks, particularly on areas that are too wet for crownvetch.

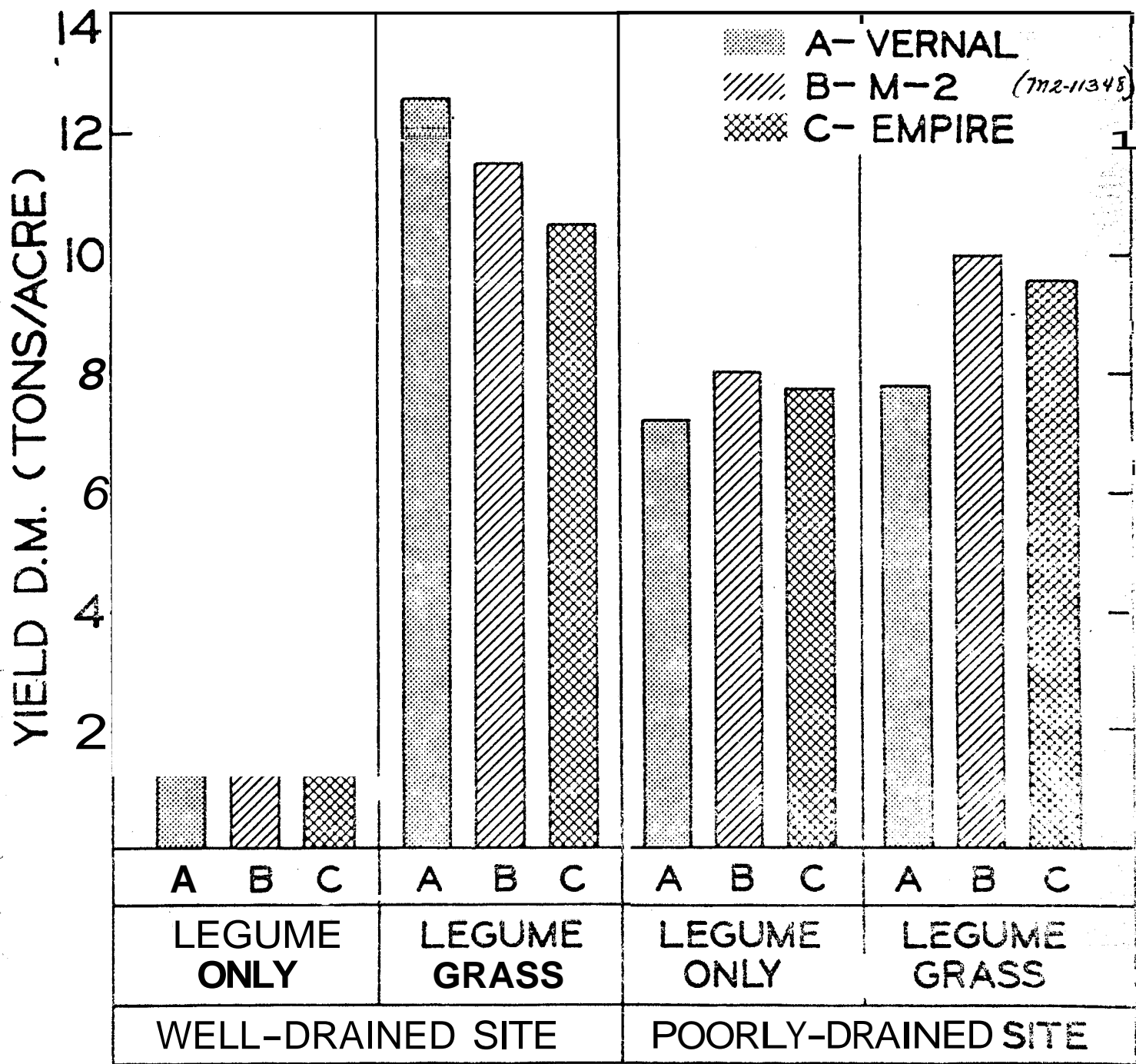
Breeder Seed: U. S. Department of Agriculture Soil Conservation Service, Rose Lake Plant Materials Center, SCS, Rt.#1, East Lansing, Michigan 48823.

*D. M. Whitt*

Director  
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U. S. Department of Agriculture

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Date

FIG. 2 RESPONSE OF ALFALFA AND BIRDSFOOT TREFOIL TO SOIL DRAINAGE; LEGUMES GROWN ALONE OR IN MIXTURE WITH BROMEGRASS 1)



1) TOTAL WEED-FREE D.M. FOR 1965, 1966, 1967 AND FIRST HARVEST IN 1968.

Higher yields with grass  
 M-2 more prod. than Empire  
 well drained alfalfa most prod.  
 poorly drained Trefoil most prod.  
 As time goes on alfalfa will go out and Trefoil will hold its own.